

CROWN

Specifications

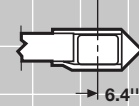
SP 3570F Series

Stockpicker

SP 3500

Four-Point Series





General Information	1	Manufacturer		Crown Equipment Corporation							
	2	Model		SP 3570F							
	3	Load Capacity*	24" Load Center to 276" lb	3000							
	4	Load Center	Platform face to load CG in	24							
	5	Power	Electric Volts	24							
	6	Operator Type	Stand-up Rider	Stockpicker							
	7	Tire Type	Load / Drive / Caster	Poly / Poly / Poly							
	8	Wheels	Load / Drive / Caster	2 / 1 / 1							
Dimensions		Mast Type	Triple-telescopic	TT							
	10	Lift Height	(LH) in	210	240	276	294	312	330	348	366
		Free Lift	With LBR in	8	20	32	38	44	56	62	68
	11	Collapsed Height	in	95	107	119	125	131	143	149	155
	12	Extended Height	(EH) in	298	328	364	382	400	418	436	454
		Truck Weight	Without Battery lb	6295	6490	6887	7008	7101	7231	7324	7417
	13	Head Length	in	75.6							
	14	Forks	Standard L x W x T in	36 x 4 x 2							
			Optional Lengths in	30, 39, 42, 45, 48, 54, 60, 72, 84							
	15	Wheelbase	in	87.5							
Performance	16	Turning Radius	in	98.5							
	17	Aisle Guide Wheel Range	in	49.5" to 77.5" (11.5" to 15.5" Greater than inside straddle in .25" increments)							
	18	Straddle Width	Inside Straddle in	38 to 63 in 1" increments							
			Outside Straddle in	Add 11"							
	19	Operator Compartment Width	in	48 Standard; 42, 54, 60 and 64 Optional							
	20	Speed Travel	Empty / Loaded mph	See Chart							
	21	Speed Lift	Empty / Loaded fpm	40/26 Low, 71/43 High							
	22	Speed Lower	Empty / Loaded fpm	40/38 Low, 80/75 High							
	23	Battery	Type	Lead Acid							
			Min Weight / Max Amp	1520/1085							
			Max Battery Size	14.25 x 36.25 x 31 High							
	24	Traction Motor	60 Min Rating hp	5.2							

* Contact factory. Capacity depends on maximum lift height, straddle width, load center and fork length.

Lift Height (inches)	Steered Wheel < 10° (1)
	Guided (2)
	Power Unit First (PUF) (3) Travel Speed (mph) Empty / Loaded
	Linear SP 3570F
0-24	7.0 (4)
25-152	7.0 - 4.0 (4)
153-200	4.0 - 3.0
201-304	3.0 - 1.5
305-366	1.5

(1) Top travel speed is reduced to 80% at a 10° steering angle, beyond 10° travel speeds gradually reduce down to 50% of top travel speed. Steering angle is automatically limited to within 10° straight travel when lift is above 200".

(2) Non-guided travel speeds between 24" and 304" are reduced.

(3) Guided travel speeds in the Forks First (FF) direction are less than Power Unit First (PUF) up to 152".

(4) Wire guided travel speeds are reduced.

Standard Equipment

1. Crown's Access 1 2 3® Comprehensive System Control
2. Crown's AC traction control system
3. 24-volt electrical system
4. Electronic steering
5. Linear Height Speed Control
6. Two-speed raise/lower with soft start and stop
7. Programmable lift/lower cut outs
8. Intelligent Braking System (IBS) with low-profile brake pedal
9. Lift motor brush wear and overtemp indicator.
10. Crown Display
 - Battery discharge indicator with lift interrupt
 - Hour meters/travel distance/stop watch
 - PIN code access capable
 - Access 1 2 3 diagnostics
 - P1, P2, P3 Performance
 - Standard steer tire direction indicator (non wire-guided trucks)
 - Enhanced steer tire direction indicator (wire-guided trucks)
11. Soft urethane twist grip with "cam grip"
12. 10° angled steer wheel with soft feel spinner
13. Storage compartment
14. Premium platform cushion
15. Clear visibility platform window
16. Clear visibility mast design
17. Key switch
18. Horn
19. Strobe light, amber
20. Hinged side gates with power disconnect
21. 14.25" battery compartment
22. 350 amp battery connector
23. 2" diameter battery compartment rollers
24. Top battery access for service
25. Removable steel battery side covers
26. Adjustable battery retainer

27. Hinged, lift off steel power unit doors
28. Emergency power cut-out
29. Operator belt and lanyard
30. Pallet clamp
31. InfoPoint® Quick Reference Guide and Maps
32. Color-coded wiring
33. 6" diameter load wheels

Optional Equipment

1. Crown wire guidance (broadband technology) operates on all frequencies ranging from 5.2 through 10 KHz without changing components.
2. End of Aisle Control System (wire or rail guidance required)
3. Aisle guide wheels for rail guidance
4. Battery retainer interlock switch
5. Work lights, dome light and two-speed fan
6. Spotlights
7. Flashing light, amber
8. Programmable lift/lower cutouts with over-rides.
9. Zone select key switch
10. 48", 54", 60" and 64" wide operator platforms
11. Corrosion conditioning
12. Freezer conditioning (Includes corrosion conditioning, ribbed floor mat, and wire mesh windshield)
13. Wire mesh screen (Standard with freezer conditioning)
14. Retractable tether
15. Load wheel and drive tire compounds
16. 30" lanyard boom
17. InfoLink® Ready
18. Positive / negative accessory cable
19. Special paint
20. Work Assist® Accessories
 - Clip pad and hook
 - Plate
 - Pocket
21. Fire extinguisher

Operator Platform

The operator area is designed for maximum visibility and stability for increased operator confidence and comfort.

The operator platform features a large window (1088 sq in) for excellent visibility. A Crown-designed clear-visibility mast affords the platform window one forward and two peripheral windows for maximum visibility, even when the platform is lowered.

The clear-visibility mast, with full free lift, extends the platform window above the mast channels for unobstructed visibility when raised.

A low-profile power unit, low placement of the lower cross brace and an outer C-channel rail assembly also contribute to excellent visibility.

A soft urethane twist grip is solidly mounted to the truck console to provide excellent stability for the operator during travel, plugging and braking. Controls for lift/lower, horn and emergency disconnect are conveniently located for efficient operation and minimal operator fatigue. The steering wheel is angled at 10° and recessed to maximize the work area and reduce steer effort. The steering wheel and spinner knob are covered with soft urethane to reduce grip force and insulate against vibration. Control location keeps the operator's posture neutral at all times.

The platform cushion, made of a microcellular composition, absorbs shock and vibration. The brake pedal has a low-profile design and when engaged is flush with the platform cushion for maximum comfort. Heavy-duty side gates, with two horizontal and one vertical support rails, communicate security to the operator. For additional safety, cut-out switches disengage truck operation when side gates are raised.

Two work lights, two dome lights and a two-speed fan are optional. "Power-on" key prevents unauthorized operation of the truck. The Access 1 2 3 Display Panel provides concise, clear feedback for the operator during truck operation.

Crown's Access 1 2 3...

The Comprehensive Access 1 2 3 System Control is a modular based communications and control system. It monitors all on-board sensors, makes decisions based on the sensor readings, and subsequently, controls all system movements safely and smoothly. All five modules are in constant communications with each other via a CAN (Control Area Network) bus so that real information is accessible to the system at all times.

- Interactive Display Module
- Traction Control Module
- Vehicle Control Module
- Steering Control Module
- Guidance Control Module

Crown Drive System

Crown has applied the latest generation AC drive system, enhanced with Access 1 2 3 technology. A Crown-manufactured drive unit uses spiral bevel and helical gears from motor to drive wheel axle.

Fixed, mounted drive motor does not rotate minimizing wear on electrical cables. Drive tire changing is simplified with this drive unit.

Crown's AC Drive system dramatically improves travel speeds, acceleration and deceleration, thus increasing productivity.

The standard linear speed control provides smooth travel speed transition as lift heights change and increases productivity.

Travel System

Truck performance specifications (maximum travel speed, coast, plugging, acceleration, travel speed at height, and low speed lowering) are adjustable using Access 1 2 3. This enables customizing truck performance to meet specific application or operator requirements.

Crown's InfoPoint® system offers evolutionary refinement for service simplicity. The InfoPoint Quick Reference Guide, on-truck component maps and information nuggets located throughout the truck allow technicians to troubleshoot without schematics, wiring diagrams, or service manuals for more than 95 percent of repairs.

The InfoPoint Quick Reference Guide provides code definition and overall component ID so the technician knows what it is, where it is, and what it does (Three W's). InfoPoint ensures faster, simpler, and higher quality service.

Intelligent Steering

Standard on the SP 3500 Series is electronic steering that is microprocessor based.

Crown's intelligent steering feature slows the truck automatically when the steer wheel is turned beyond 10°. Access 1 2 3 monitors the height of the operator platform, truck speed and steer wheel position.

Steering wheel rotation provides smooth, operator feedback. Steer effort is minimal, lock to lock revolutions is 4.5 turns. Drive wheel rotates a full 180° for maximum maneuverability. Auto centering drive tire for trucks equipped with rail guidance. Steering is connected to the Control System for full diagnostics and operator interface.

Intelligent Braking System (IBS)

Crown's patented Intelligent Braking System combines motor braking with optimum amounts of friction braking (three varying levels of force). The appropriate level of braking is applied dependent upon platform height, direction of travel, and truck weight. Braking force is automatically reduced as height increases and speed decreases. Optimum braking for the right elevation gives operators more confidence and better control, while eliminating abrupt stops and reducing platform sway. Brake lining life can be expected to last up to twice as long before replacement is necessary.

Braking can also be accomplished by proportional plugging, which permits the operator to control the rate of deceleration when extended stopping distance is preferred.

Simplified Hydraulics

Heavy-duty series wound pump motors and gear pumps are assembled into an integral unit. Two-speed lift (high/low) is standard. Crown-manufactured solenoid type manifolds with built-in checks and relief valves.

Two-speed lowering (high/low) with soft start is standard on all models. Low speed lowering is adjustable with the use of the Access 1 2 3 Display. Soft-start lowering feature reduces the harshness at the beginning and end of the lowering cycle. The softer start is accomplished by controlling how quickly the proportional valve is opened or closed. Valve actuation is controlled by a driver in the steering control module.

Maximum lowering speed is regulated by a pressure compensating flow control valve. Velocity fuses are used in all cylinders to stop lowering should lowering speed exceed a preset value due to a line rupture. A hydraulic accumulator is used to cushion raise and lower functions. Manual lowering control on manifold block allows lowering of platform from ground level. Oil reservoir is designed with a 100 mesh screen at the fill location, a suction strainer, spin-on type 10 micron return line filter and a magnetic drain plug.

Four-wheel Configuration

A drive tire, caster wheel, and two load wheels provide a four-point foot print. Caster is adjustable to compensate for tire wear.

The Crown Mast Assembly

High visibility three-stage masts feature nested rail design with lift cylinders positioned behind mast rails. A low center position cylinder for free lift along with proper routing of hosing and cables optimizes visibility through the mast. Built-in sensors detect chain slack and shut down primary lower function. Exclusive spring-loaded staging bumpers virtually eliminate platform impact as platform stages. Negative rail drop allows shimming of mast rollers without major disassembly.

Stronger Low Profile Power Unit

Power unit is fabricated from heavy-gauge steel. Lower skirt is .75" steel that runs 9" high for component protection. Rugged steel doors suspended on heavy-duty pin hinges cover power unit componentry. Doors swing wide for open access. Doors can also be lifted off for unrestricted service access. Door bolts have exclusive convex design that mates with concave door holes for fast reinstallation of door bolts. Battery side covers are all steel. An optional battery retainer interlock switch is available. Top battery access is available by lifting cover. Cover has integral support post.

Wheels and Tires

Polyurethane drive tire, 13" diameter x 5.5" wide x 8" hub diameter. Load wheels are 6" diameter polyurethane x 4.25" wide. Optional polyurethane aisle guide wheels are 2" wide with a 4" or 2.5" diameter. Casters have dual 3" wide x 10" diameter polyurethane load wheels.

Forks

Standard fork is 2" thick x 4" wide x 36" long forged steel, with optional lengths available. A 3" thick x 6" wide x 84" long box section fork is optional. Fork spread (adjustable) 24" to 30".

Pallet Clamp

Standard equipment includes a foot-applied, hand-released pallet clamp designed for use with pallets having center stringers.

Safety Shield

Safety glass to protect operator from chains and moving parts while in his normal operating position.

Audible Travel Alarm Option

Safety considerations and dangers associated with audible travel alarms include:

- Multiple alarms can cause confusion.
- Workers ignore the alarms after day-in and day-out exposure.
- Operator may transfer the responsibility for "looking out" to the pedestrians.
- Annoys operators and pedestrians.

Other Options Available

Contact your local Crown dealer.

Dimensions and performance data given may vary due to manufacturing tolerances. Performance is based on an average size vehicle and is affected by weight, condition of truck, how it is equipped and the conditions of the operating area. Crown products and specifications are subject to change without notice.



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You can count on Crown to build lift trucks designed for safe operation, but that's only part of the safety equation. Crown encourages safe operating practices through ongoing operator training, safety-focused supervision, maintenance and a safe working environment. Go to crown.com and view our safety section to learn more.

Because Crown is continually improving its products, specifications are subject to change without notice.

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